



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,036	12/04/2001	Finbar Naven	1267.1028	9313
21171	7590	05/31/2006	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			KUMAR, PANKAJ	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/000,036

Applicant(s)

NAVEN ET AL.

Examiner

Pankaj Kumar

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 15-26, 42 and 44 is/are allowed.
- 6) ☒ Claim(s) 11, 27 and 35 is/are rejected.
- 7) ☒ Claim(s) 12-14, 28-34, 36-41 and 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/4/2001, 2/21/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 2/21/2006 have been fully considered but they are not persuasive.
2. As per claim 11, applicant argues about amendments made to the preamble. This is not persuasive since a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).
3. As per claims 27, 35, applicant argues that Eilken does not teach clock signals having the same frequency. This is not persuasive since in the office action, it was noted that Buckner taught clock signals having the same frequency.
4. As per claims 27, 35, applicant argues that it is not possible to combine Buckner with Eilken since Eilken's two different recovered output clock signals use two different buffers and Eilken teaches nothing related to data eye shape and thus Eilken does not teach that "depending on the shape of the data eye, it may be better to sample the received data stream using an offset clock signal which has the same frequency but differs in phase from the recovered clock signal produced by the clock recovery circuit DPLL" (applicant's arguments page 19). This is not persuasive since applicant has not claimed such limitations.
5. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the

Art Unit: 2611

teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, one of ordinary skill in the art, would have been motivated to combine the teachings of Tulpule with Brauns because Tulpule suggests clock synchronizing (something broad) in general and Brauns suggests the beneficial use of clock synchronizing by recovering the clock in order to retime with a reference (Brauns col. 1 lines 25-30) in the analogous art of synchronizing. Also in this case, one of ordinary skill in the art, would have been motivated to combine the teachings of Buckner with Eilken because Buckner suggests aligning data with one of the phases of the clock (something broad) in general and Eilken suggests the beneficial use of aligning data with two phases of the clock such as if data is from different places or in knowing which one of the two phases provides better alignment in the analogous art of synchronization.

6. Applicant argues “citing examples of teachings does not amount to defining motivation in the references to effect the combination of both. MPEP 2143-2143.03”. This is not persuasive for a number of reasons, first no where in MPEP 2143-2143.03 is there any mention of the word “examples” much less support for applicant’s argument. Secondly, patent references in general teach the usage of their inventions, e.g. patent references, in general and in this case, teach examples of how to use their inventions. There is no teaching in US patent law that a teaching from a prior art patent cannot be used as prior art (as long as it meets the requirements of date, inventorship, etc.). In fact, teachings from prior art patents are one of the items that are supposed to be used as grounds of rejection including motivation.

***Response to Amendment***

***Specification***

7. The abstract of the disclosure is accepted.

***Drawings***

8. The drawings filed on 12/4/2001 are accepted. The amended drawing for fig. 6 was received on 2/21/2006. This drawing is accepted.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tulpule USPN 4,696,019 in view of Brauns USPN 5,689,533. Here is how the references teach the claims:

11. As per claim 11, Tulpule teaches N rising-edge latches (Tulpule fig. 2: 32), each connected for receiving said stream of serial data (Tulpule fig. 5: shows 32 in detail; 36) and each triggered at said rising edge of a different one of the N cycles (Tulpule col. 17 lines 44-47) of said repeating series (Tulpule fig. 2a, 11b: clock is repeating) to take a rising-edge sample of the data (Tulpule col. 17 lines 41-44); N falling-edge latches (Tulpule fig. 2: 34), each connected for receiving said stream (Tulpule fig. 6: shows 34 in detail; 38) and each triggered at said falling

Art Unit: 2611

edge (Tulpule col. 17 lines 48-53; fig. 6 shows inverting the clock 38 so that the trigger at 3 will occur at the falling edge of 38) of a different one of the N cycles (Tulpule col. 17 lines 40-47: input counter frame, separate counter frame) of said repeating series (Tulpule fig. 2a, 11b: clock is repeating) to take a falling-edge sample of the data (Tulpule col. 17 lines 48-53); and a sample processing circuit which processes the rising-edge and falling edge samples (Tulpule fig. 2: elements after 32 and 34 process the samples) to recover a clock signal from the data stream (not in Tulpule but would be obvious as explained below).

12. Tulpule does not teach to recover a clock signal from the data stream. Brauns teaches to recover a clock signal from the data stream (Brauns fig. 1: retimed clock, timing recovery 200, retiming edge; col. 2 lines 9-10). Thus, it would have been obvious, to one of ordinary skill in the art, at time the invention was made, to arrive at the recover a clock signal from the data stream as recited by the instant claims, because the combined teaching of Tulpule with Brauns suggest recover a clock signal from the data stream as recited by the instant claims.

Furthermore, one of ordinary skill in the art, would have been motivated to combine the teachings of Tulpule with Brauns because Tulpule suggests clock synchronizing (something broad) in general and Brauns suggests the beneficial use of clock synchronizing by recovering the clock in order to retime with a reference (Brauns col. 1 lines 25-30) in the analogous art of synchronizing.

13. Claim 27, 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckner USPN 5,509,037 in view of Eilken USPN 6,445,252. See prior action for details.

***Allowable Subject Matter***

14. Claims 12-14, 28-34, 36-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
15. Claims 1-10, 15-18, 19-26, 42-44 are allowed.
16. See prior action for details.

***Conclusion***

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

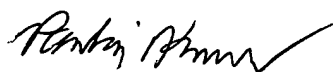
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2611

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (571) 272-3011. The examiner can normally be reached on Mon, Tues, Thurs and Fri after 8AM to after 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Pankaj Kumar  
Patent Examiner  
Art Unit 2611

PK